

ANNUAL REPORT OF THE ORIGIN OF NATURAL GAS LIQUIDS PRODUCTION
FORM EIA-64A
CALENDAR YEAR 1999

This report is mandatory under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see Page 2 of the Instructions. Public reporting burden for this collection of information is estimated to average 5.9 hours per respondent, including the time of reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Statistics and Methods Group EI-70, Washington, DC 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

PLEASE COMPLETE THIS
 FORM AND RETURN TO

ENERGY INFORMATION ADMINISTRATION, EI-45
 1000 INDEPENDENCE AVE., SW MAIL STATION: 2G-024
 WASHINGTON, DC 20585

PLANT AND PRODUCTION REPORT IDENTIFICATION

1.0 Does this report reflect active natural gas processing at the facility for the entire year? " Yes " No
 Months covered by this report _____ through _____ (Include Explanatory Notes in Section 8.0)

2.0 If label is incorrect or information is missing or no label is given, enter correct information to the right

2.1 Plant Operator's Name

2.2 Contact Person's Name

2.3 Plant Name

2.4 Geographic Location (Use Area of Origin Codes, Page 6)

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2.5 Mailing Address

2.6 City State Zip Code

2.7 Telephone Number ()

3.0 Parent Company's Name

4.0 Submission Status ☐ Original ☐ Amended

5.0 Origin of Natural Gas Received and Natural Gas Liquids Produced

Line	Area of Origin Code (A)	Natural Gas Received (MMcf) (B)	Natural Gas Liquids Production (Mbbl) (C)
5.1			
5.2			
5.3			
5.4			
5.5			
5.6			
5.7			
5.8			
5.9			
5.10			
5.11			
5.12			
5.13			
5.14			
5.15			
5.16	TOTAL		

6.0 Gas Shrinkage Resulting from Natural Gas Liquids Extracted (MMcf)

7.0 Natural Gas Used as Fuel in Processing (MMcf)

8.0 Explanatory Notes

9.0 Certification: I certify that the information provided herein and appended hereto is true and accurate to the best of my knowledge.

Name (Please Print)	Date
Signature	Title
Fax Number: () -	E-mail address:

ANNUAL REPORT OF THE ORIGIN OF NATURAL GAS LIQUIDS PRODUCTION

FORM EIA-64A

CALENDAR YEAR 1999

GENERAL INSTRUCTIONS

A. PURPOSE

The collection of basic, verifiable information on the Nation's reserves and production of natural gas liquids (NGL) is mandated by the Federal Energy Administration Act of 1974 (FEAA) (Public Law 93-275) and the Department of Energy (DOE) Organization Act of 1977 (Public Law 95-91). Gas shrinkage volumes reported on the Energy Information Administration (EIA) Form EIA-64A by natural gas processing plant operators are used with natural gas data collected on a "wet after lease separation" basis on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," to estimate "dry" natural gas reserves and production volumes regionally and nationally. The shrinkage data are also used, along with the plant liquids production data reported on Form EIA-64A, and lease condensate data reported on Form EIA-23, to estimate regional and national gas liquids reserves and production volumes. This information is the only comprehensive source of credible natural gas liquids data, and is required by DOE to assist in the formulation of national energy policies.

The information collected on Form EIA-64A will be used: as key input to the EIA publication entitled, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*; to estimate extraction loss volumes contained in the EIA publication *Natural Gas Annual*; and as the replacement for the natural gas liquids data which were published in the past by the American Petroleum Institute (API) and the American Gas Association (AGA) in their annual statistical reports entitled, *Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States*.

The data collected on Form EIA-64A include the volumes of natural gas received and the natural gas liquids extracted at gas processing plants, by areas of origin, the total gas shrinkage resulting from the natural gas liquids extracted, and the volume of natural gas utilized as fuel at the gas processing plants.

B. WHO MUST SUBMIT

Each operator of one or more domestic natural gas processing plants is required to file a Form EIA-64A for each plant operated as of December 31, 1999. If a plant was shut down as of December 31, 1999 but was operated earlier in the calendar year, a Form EIA-64A must be submitted for that plant. In cases in which a plant was

operated by two or more operators during the calendar year, the operator as of December 31, 1999 should file a Form EIA-64A that covers the entire calendar year.

If the operator is unable to obtain from previous operators the information required to compile accurate data covering the entire calendar year, then each operator should file a Form EIA-64A covering only that portion of the calendar year during which he operated the plant.

If there is some question whether a plant is a "natural gas processing plant" or "field separation facility," contact your company's responsible preparer for Form EIA-23, *Annual Survey of Domestic Oil and Gas Reserves*, in order to internally coordinate your responses. This will ensure that double reporting or nonreporting of natural gas liquids data does not occur. If you need assistance, contact the EIA-64A Coordinator toll-free at 1-800-879-1470 from 8:30 a.m. to 5:00 p.m. CST.

C. WHAT MUST BE SUBMITTED

Each operator is required to complete a separate Form EIA-64A for each gas processing plant. If you had a plant in operation as of December 31, 1999 and did not receive a Form EIA-64A for it, a completed form should still be filed for that plant. Additional forms may be obtained on the Internet at <http://www.eia.doe.gov>, by contacting the EIA-64A Coordinator toll-free at 1-800-879-1470, or photocopies of the form may be used. Respondents need submit only one copy of the completed form for each plant. Form EIA-64A solicits annual data by area of origin not required on Form EIA-816, "Monthly Natural Gas Liquids." EIA-64A does not replace or supersede Form EIA-816 which is still required on a monthly basis.

D. WHEN AND WHERE TO SUBMIT

Form EIA-64A must be submitted on or before April 1, 2000 for the 1999 calendar year. Completed forms should be addressed to:

United States Department of Energy
Energy Information Administration, EI-45
1000 Independence Ave., SW
Mail Station: 2G-024 Forrestal
Washington, DC 20585

For your convenience, a self-addressed envelope has been enclosed. You can also FAX your completed form to (202) 586-1076. For information concerning requests for extension of time to file or for exception from filing Form EIA-64A, contact the EIA-64A Coordinator toll-free at 1-800-879-1470 from 8:30 a.m. to 5:00 p.m. CST.

E. RECORD KEEPING REQUIREMENTS

You are required to keep all records necessary to reconstruct the data reported on this form for a period of three (3) years.

F. SANCTIONS

The timely submission of Form EIA-64A by those required to report is mandatory under Section 13 (b) of the Energy Information Administration Act of 1974 (FEAA) (Public Law 93-275), as amended. Failure to respond may result in a civil penalty of not more than \$2,500 for each violation, or a fine of not more than \$5,000 for each willful violation. The government may bring a civil action to prohibit reporting violations which may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements.

G. CONFIDENTIALITY

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Information Administration Act requires the Energy Information Administration to provide company-specific data to the Department of Justice, or to any other Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on this form will be kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause

substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed.

Information on this form is collected for statistical purposes and will not be published by the DOE in individually identifiable form. Information from this form shall be provided to the United States Department of Interior offices: Mineral Management Service and United States Geological Survey for statistical purposes only, in conducting their resource estimation activities.

H. DATA ENTRY STANDARDS

1. Total Operated Basis

All data are to be reported on a total operated basis (commonly known as the "gross operated" or "8/8ths" basis) by the operator of the natural gas processing plant.

2. Units of Measurement

Natural gas liquid volumes are to be reported in thousands of barrels (Mbbbl) of 42 U.S. gallons at 60° Fahrenheit. Natural gas volumes are to be reported in millions of cubic feet (MMcf) at 14.73 psia and 60° Fahrenheit.

3. Rounding

Liquid volumes should be rounded to the nearest thousand barrels. When rounding liquid volumes, round quantities of 500 barrels and above to the next higher Mbbbl, and round quantities of less than 500 barrels down to the next lower Mbbbl. Similarly, when rounding natural gas volumes, round quantities of 500 Mcf and above to the next higher MMcf and round quantities of less than 500 Mcf down to the next lower MMcf.

EXAMPLES:

For Liquids, 7,500 barrels as: 8 Mbbbl
467 barrels as: 0 Mbbbl

For Gas, 8,500,000 cubic feet as: 9 MMcf
10,459,000 cubic feet as: 10 MMcf

4. Schedule Preparation

In order to facilitate the processing of data, reproduced forms are requested to be on the same size paper (8 1/2" x 11"). Enter responses by typing or by printing in black ink using all capital letters.

SPECIFIC INSTRUCTIONS

SECTION 1.0, "Does this report reflect..." - Insert an "X" in the appropriate box to indicate whether this Form EIA-64A report reflects active natural gas processing at the facility for the entire calendar year. If you check "No", enter the months to which the data filed in this report pertain and provide a detailed explanation in Section 8.0. Specify if the plant was shut down and the anticipated start-up date, if known. Specify if the plant was dismantled. If there was a change in operators during the year and this report does not cover operations for the entire year, please supply any specific information concerning the previous operator which you may have, such as corporate name, mailing address and telephone number. Specify the facility type (e.g., fractionator, compressor station, etc.) if the facility is not a natural gas processing plant as defined in the Glossary and no data are, therefore, being filed.

SECTION 2.0, "If label is incorrect . . ." - Enter correct information in the following subitems, 2.1 - 2.7, if the label does not reflect current information.

Item 2.1, Plant Operator's Name - Enter the legal corporate name of the plant operator. (See **Operator** in the Glossary)

Item 2.2, Contact Person Name - Enter the name of the individual to whom inquiries regarding the submitted data will be directed, if necessary, and to whom Form EIA-64A will be mailed in the future at the above address.

Item 2.3, Plant Name - Enter the name of the natural gas processing facility covered by this report. (See **Natural Gas Processing Plant** in the Glossary)

Item 2.4, Geographic Location of Plant - Enter the code pertaining to the State or State subdivision in which the reporting plant is located. (See **Area of Origin Codes and Subdivision Maps**)

Item 2.5 through 2.6, Identification - Enter current street address, city, state, and 9-digit zip code. Future forms will be mailed to this address.

Item 2.7, Telephone Number - Enter the business telephone number of the contact person.

SECTION 3.0: Parent Company's Name - Enter the legal name of the parent company, if any, which exercises ultimate control over the plant operator.

SECTION 4.0: Submission Status - Insert an "X" in the proper box to indicate that this is the first submission of data for the calendar year or that it amends data previously submitted for this calendar year.

SECTION 5.0: Origin of Natural Gas Received and Natural Gas Liquids Produced - The total volume of natural gas received by this natural gas processing plant

during the calendar year, and the natural gas liquids extracted from this gas, should be attributed to the State(s) or State subdivision(s) of origin as accurately as possible.

Items 5.1 through 5.15, Area of the Origin Code, Column (A) - This column is to be used to indicate the areas of origin specified in the list of areas contained in **Areas of Origin Codes and Subdivision Maps** beginning on page 7. Please enter the correct code for each geographic area which contributed gas to be processed during the calendar year. If there are more than fifteen areas of origin involved for the same plant, complete an additional Form EIA-64A schedule and return the two schedules as one filing.

Item 5.1 through 5.16, Natural Gas Received (MMcf), Column (B) - Estimate as accurately as possible the volumes of gas received for processing by area of origin and report these volumes in Column (B) adjacent to the appropriate Area of Origin Code in Column (A). These estimates should consider all relevant information available to the respondent and should be as precise as possible. Do not include refinery offgases. The total gas processed by the plant during the calendar year should be entered on line 5.16. The sum of the volumes reported in lines 5.1 through 5.15 should be the same as the total volume reported on line 5.16. (See **Natural Gas** in the Glossary)

Items 5.1 through 5.16, Natural Gas Liquids Production (Mbbl), Column (C) - Estimate as accurately as possible the volume of natural gas liquids attributable to the gas volumes reported in Column (B) and enter these amounts on the appropriate line of Column (C). The estimates of natural gas liquids recovered by area of origin should consider, to the fullest extent practical, all information available to the respondent concerning the relative liquid yields of the gas processed. Include only liquids production resulting from on-site gas processing. Include all volumes of plant condensate and scrubber oil recovered from natural gas at the plant.

Report on line 5.16 the total natural gas liquids recovered from the natural gas processed by the plant during the calendar year. The sum of the volumes reported in lines 5.1 through 5.15 should be the same as the total volume on line 5.16. This total should also equal the sum of the monthly volumes of "Production During Month" minus the sum of monthly volumes of "Inputs During Month" reported on Form EIA-816, "Monthly Natural Gas Liquids Report" (formerly Form EIA-64). (See **Natural Gas Liquids** in the Glossary).

SECTION 6.0: Gas Shrinkage Resulting From Natural Gas Liquids Extracted - Estimate the volumes of gas shrinkage resulting only from the removal of natural gas liquids from the natural gas received at the plant. Do not

include gas shrinkage attributable to nonhydrocarbon gases, gas used for fuel, gas which was vented or flared or gas which was unaccounted for.

The ratio of the shrinkage volume to the total plant NGL volume reported in Item 5.16 (Column C) should range from 1.558 MMcf per thousand barrels, which is the approximate vapor equivalent for pure ethane, to about 0.940 MMcf per thousands barrels, which is the approximate vapor equivalent for natural gasolines and plant condensate.

After converting each of the individual plant component(s) or product(s) (i.e., ethane, propane, isobutane, normal butane, isopentane, natural gasoline, plant condensate and other products) to the equivalent gas volume, these equivalent gas volumes should then be summed to determine the total plant shrinkage volume and plant condensate.

Calculate the equivalent gas volumes for the natural gas liquids components by multiplying the specific liquid product(s) by the appropriate conversion factor(s) listed in the table below.

Component or Product	Conversion Factor (Mcf/Bbl)
Methane*	2.468
Ethane	1.558
Propane	1.499
Isobutane	1.245
Normal Butane	1.288
Isopentane	1.095
Natural Gasoline	0.940
Plant Condensate	0.940
Other Products	0.940

*Not LNG.

Conversion factors for other natural gas liquid components may be obtained from the EIA-64A Coordinator toll-free at 1-800-879-1470 from 8:30 a.m. to 5:00 p.m. CST.

EXAMPLE:

To convert 50,000 barrels of propane to the equivalent gas volume:

$$(50 \text{ Mbbbl}) \text{ times } (1.499) = 74.95 \text{ or } 75 \text{ MMcf}$$

SECTION 7.0: Natural Gas Used as Fuel in Processing (MMcf) - Report the volume of natural gas utilized as fuel at the natural gas processing plant. If fuel use was not metered, please provide your best estimate. If the plant utilizes some other type of fuel, such as electricity, report 0 and indicate the reason in Section 8.0, Explanatory Notes.

SECTION 8.0: Explanatory Notes - You may comment on any reported data item in order to enhance its clarity. If more space is needed than that provided, continue comments on another sheet of paper of equal size and attach it to the form.

SECTION 9.0: Certification - Enter the name, title, phone number, fax number and e-mail address of the individual designated by the company to sign the certification and the date of signing. This individual must sign in the space provided on the form.

GLOSSARY

Field Separation Facility - A surface installation designed to recover lease condensate from a produced natural gas stream, frequently originating from more than one lease, and managed by the operator of one or more of these leases.

Natural Gas - A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions. The principal hydrocarbons usually contained in the mixture are methane, ethane, propane, butanes, and pentanes. Typical nonhydrocarbon gases which may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide and nitrogen.

Natural Gas Liquids - Those hydrocarbons in natural gas which are separated from the gas through the processes of absorption, condensation, adsorption, or other methods in gas processing or cycling plants. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as condensate, natural gasoline, and liquefied petroleum gases. Where hydrocarbon components lighter than propane are recovered as liquids, these components should also be included with natural gas liquids.

Natural Gas Processing Plant - A facility designed to recover natural gas liquids from a stream of natural gas which may or may not have passed through lease separators and/or field separation facilities. Another function of natural gas processing plants is to control the quality of the processed natural gas stream. Cycling plants are to be considered natural gas processing plants.

Operator - The person responsible for the management and day-to-day operation of one or more natural gas processing plants as of December 31 of the calendar year. The operator is generally a working interest owner or a company under contract to the working interest owner(s). Plants shut down during the calendar year are also considered "operated" as of December 31. (See **Person**)

Person - An individual, a corporation, a partnership, an association, a joint-stock company, a business trust or an unincorporated organization.

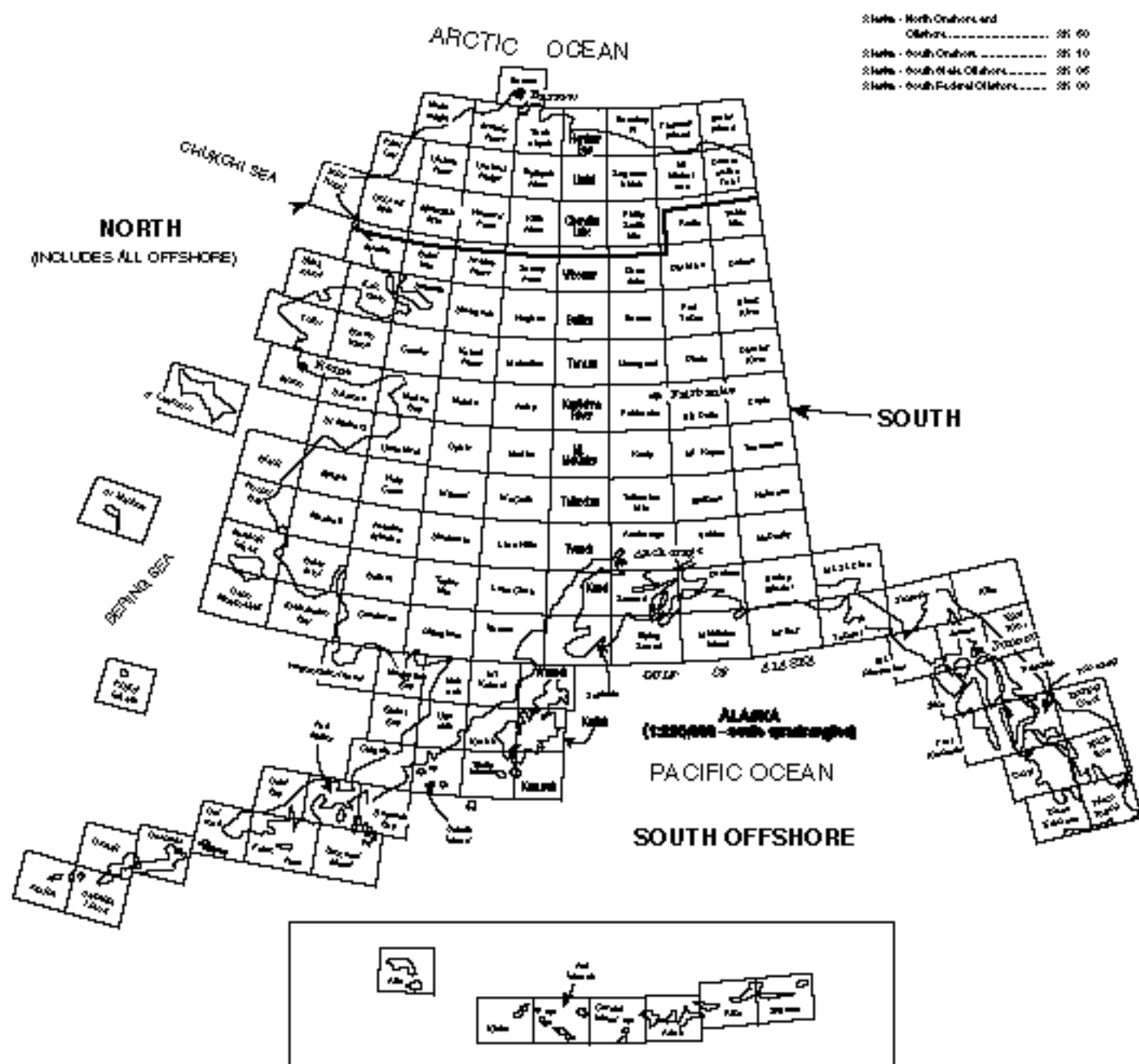
AREA OF ORIGIN CODES

<u>State Name and Geographic Subdivision</u> ¹	<u>Code</u>	<u>State Name and Geographic Subdivision</u> ¹	<u>Code</u>
Alabama Onshore	ALXX	New Mexico - West	NM50
Alabama – State Offshore	AL05	New York	NYXX
Alaska - North Onshore and Offshore ²	AK50	North Carolina	NCXX
Alaska - South Onshore	AK10	North Dakota	NDXX
Alaska - South State Offshore	AK05	Ohio	OHXX
Arizona	AZXX	Oklahoma	OKXX
Arkansas	ARXX	Oregon	ORXX
California – Coastal Region Onshore	CA50	Pennsylvania	PAXX
California – Los Angeles Basin Onshore	CA90	Rhode Island	RIXX
California – San Joaquin Basin Onshore	CA10	South Carolina	SCXX
California – State Offshore	CA05	South Dakota	SDXX
Colorado	COXX	Tennessee	TNXX
Connecticut	CTXX	Texas - Railroad Commission District 1	TX10
Delaware	DEXX	Texas - Railroad Commission District 2 Onshore	TX20
District of Columbia	DCXX	Texas - Railroad Commission District 3 Onshore	TX30
Florida – Onshore	FLXX	Texas - Railroad Commission District 4 Onshore	TX40
Florida - State Offshore	FL05	Texas - Railroad Commission District 5	TX50
Georgia	GAXX	Texas - Railroad Commission District 6	TX60
Hawaii	HIXX	Texas - Railroad Commission District 7B	TX70
Idaho	IDXX	Texas - Railroad Commission District 7C	TX75
Illinois	ILXX	Texas - Railroad Commission District 8	TX80
Indiana	INXX	Texas - Railroad Commission District 8A	TX85
Iowa	IAXX	Texas - Railroad Commission District 9	TX90
Kansas	KSXX	Texas - Railroad Commission District 10	TX95
Kentucky	KYXX	Texas - State Offshore	TX05
Louisiana – North	LA50	Utah	UTXX
Louisiana – South Onshore	LA10	Vermont	VTXX
Louisiana – South State Offshore	LA05	Virginia	VAXX
Maine	MEXX	Washington	WAXX
Maryland	MDXX	West Virginia	WVXX
Massachusetts	MAXX	Wisconsin	WIXX
Michigan	MIXX	Wyoming	WYXX
Minnesota	MNXX	Federal Offshore - Atlantic	AC00
Mississippi – Onshore	MSXX	Federal Offshore - Gulf of Mexico (Alabama)	AL00
Mississippi – State Offshore	MS05	Federal Offshore - Gulf of Mexico (Florida)	FL00
Missouri	MOXX	Federal Offshore - Gulf of Mexico (Louisiana)	LA00
Montana	MTXX	Federal Offshore - Gulf of Mexico (Mississippi)	MS00
Nebraska	NEXX	Federal Offshore - Gulf of Mexico (Texas)	TX00
Nevada	NVXX	Federal Offshore - Pacific (Alaska)	AK00
New Hampshire	NHXX	Federal Offshore - Pacific (California)	CA00
New Jersey	NJXX	Federal Offshore - Pacific (Oregon)	OR00
New Mexico – East	NM10		

¹Refer to maps for subdivision boundaries in the States of Alaska, California, Louisiana, New Mexico, and Texas.

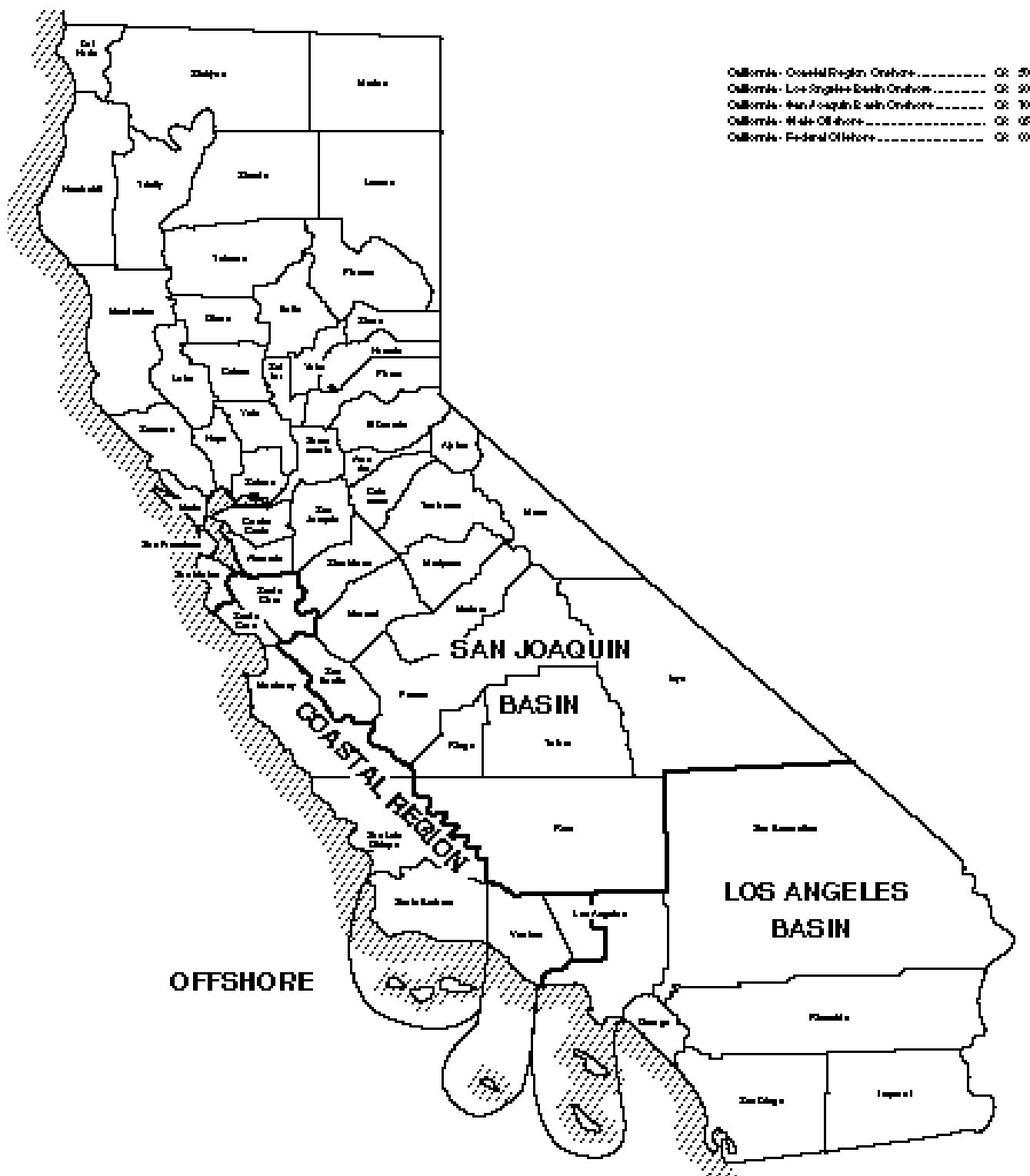
²Includes both State and Federal domain.

MAPS OF SELECTED STATE SUBDIVISIONS



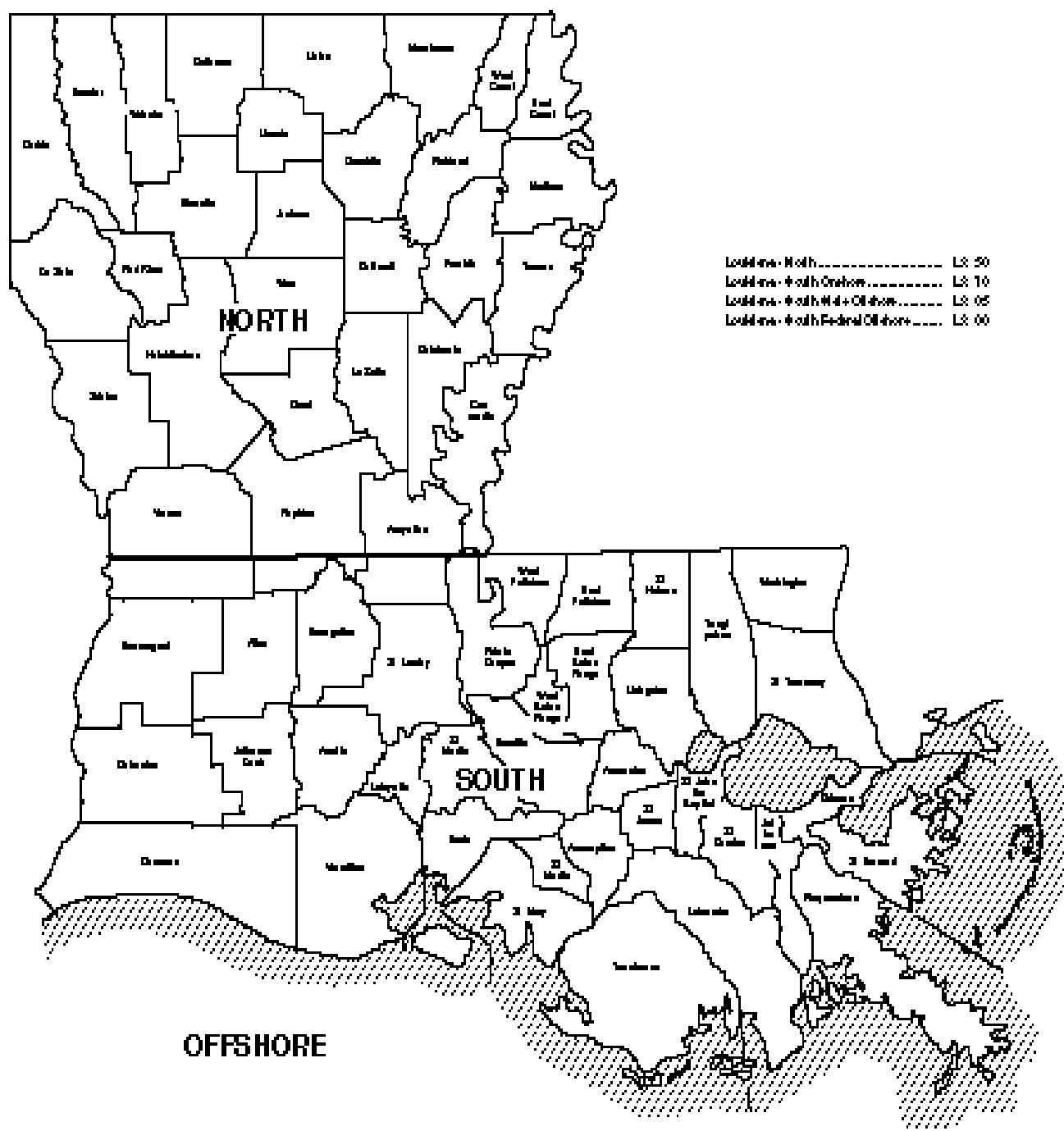
Source: After U.S. Geological Survey

Alaska Subdivisions and U.S. Geological Survey Quadrangles



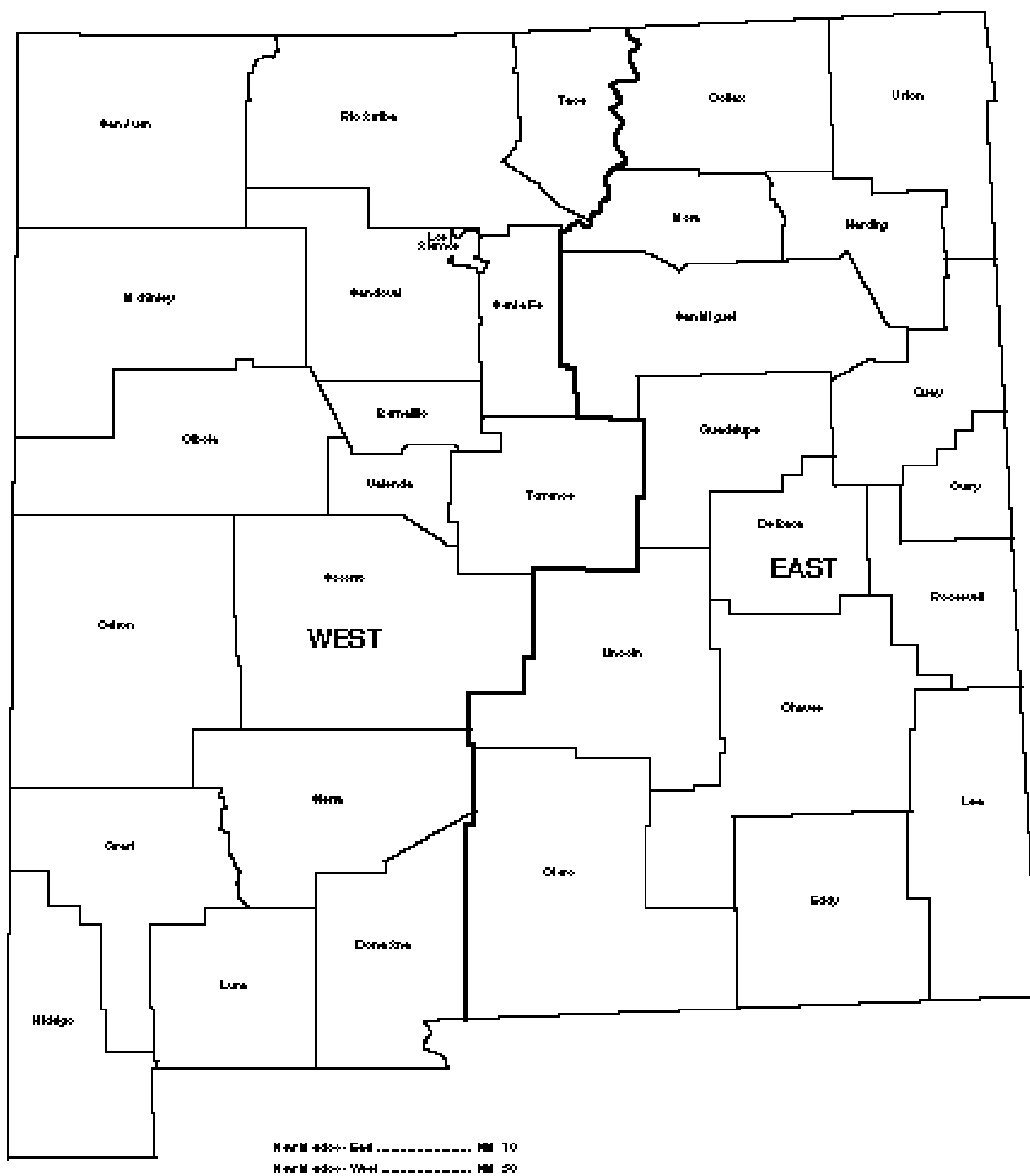
Source: Energy Information Administration, Office of Oil and Gas.

Subdivisions of California



Source: Energy Information Administration, Office of Oil and Gas

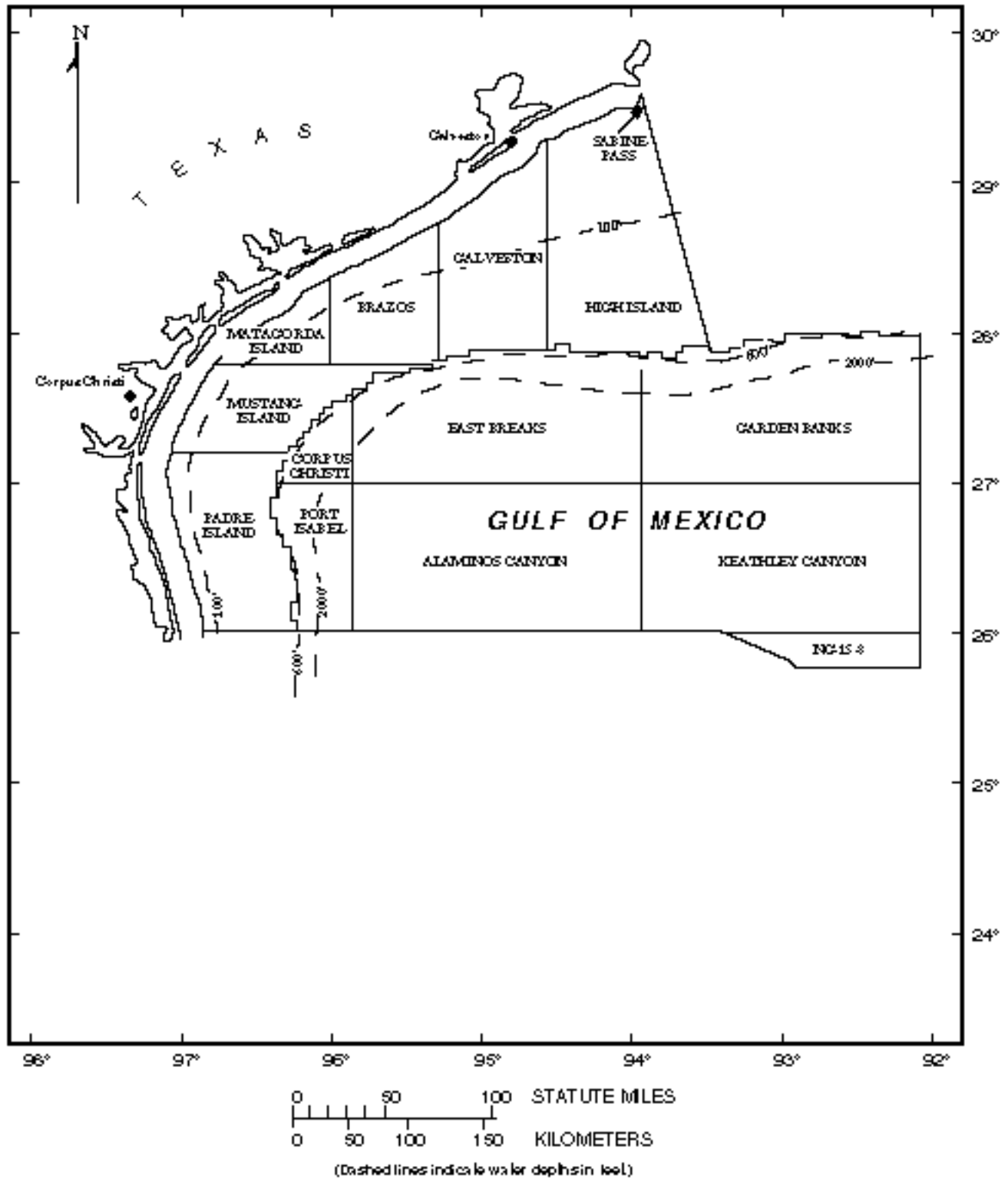
Subdivisions of Louisiana



Source: Energy Information Administration, Office of Oil and Gas

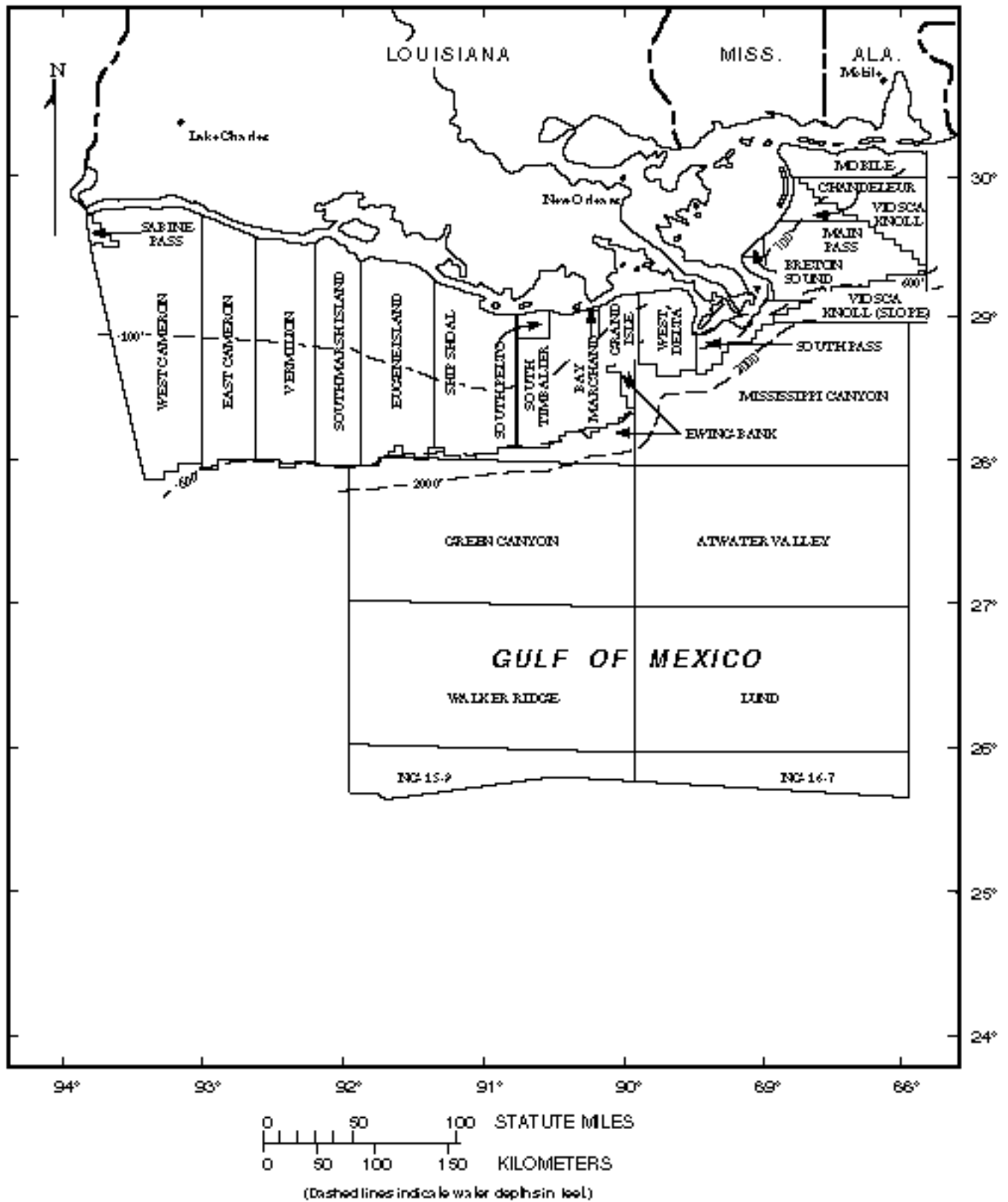
Subdivisions of New Mexico

Western Planning Area, Gulf of Mexico Outer Continental Shelf Region



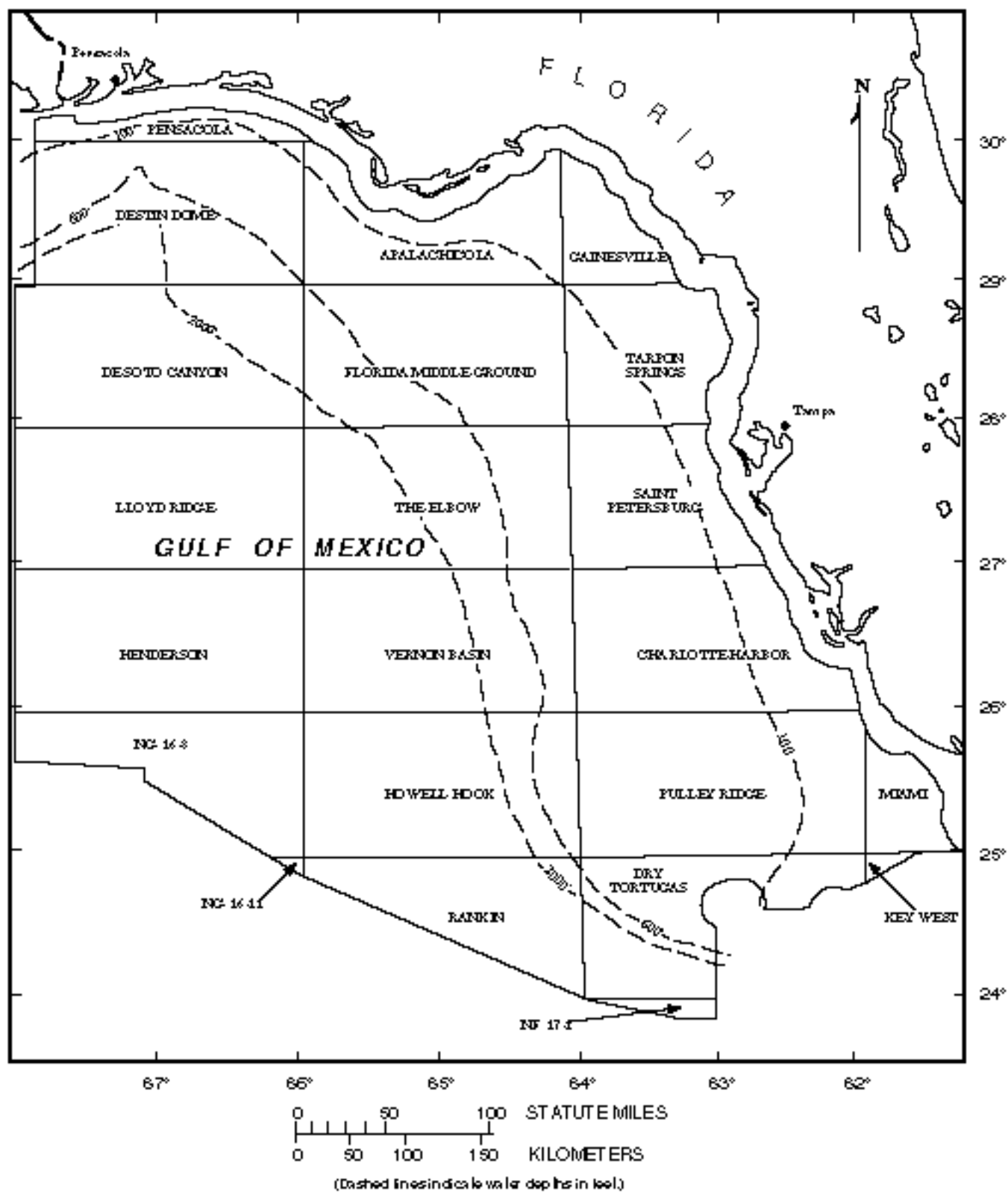
Source: After Minerals Management Service, U.S. Department of the Interior

Central Planning Area, Gulf of Mexico Outer Continental Shelf Region



Source: After Minerals Management Service, U.S. Department of the Interior

Eastern Planning Area, Gulf of Mexico Outer Continental Shelf Region



Source: After Minerals Management Service, U.S. Department of the Interior.